

November 20, 2011

US EPA NRRB
c/o Amy Legare
1200 Pennsylvania Avenue, NW
Mail Code 5204P
Washington, DC 20460

RE: Passaic River Superfund Cleanup Remedial & Disposal Alternatives

Dear Ms. Legare:

Thank you for reviewing the following comments regarding the proposed clean-up of the Passaic River Superfund site in New Jersey. The Ironbound Community Corporation (ICC) is the co-chair of the Community Advisory Group for the Passaic River site and we have been long time advocates for the full clean up and restoration of the Passaic River. In the course of our participation in the CAG we have learned a great deal about the various remediation and disposal options proposed for the Passaic River. As part of this process and as a result of discussions throughout our communities in Newark, New Jersey we would like to share with you some of our outstanding questions and concerns regarding the Dredged Material Management (DMM) Scenario Option C which involves the *decontamination and reuse via thermal treatment*.¹ The thermal processing of dioxin contaminated sediments, we believe, presents very serious environmental health and environmental justice risks for local communities.

We write, particularly, to express our strong opposition to any remedy that would thermally treat or incinerate Passaic River sediments and in particular developing any such facility in or near environmental justice communities. Many objections have been raised to this option by residents and stakeholders, including ICC. These include:

- When this technology was piloted as a bench scale project in Bayonne, NJ starting in 1995 until 2008, several problems ensued that forced the shut down and modification of the pilot several times.

¹ USEPA, October 12, 2012. Lower Eight Miles of the Lower Passaic River Remedial Investigation and Focused Feasibility Study Summary for Community Advisory Group, p.16.



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- a. Despite the implementation of changes to the plant suggested during the pilot study, both pilot campaigns experienced equipment-related problems, some due to the installation of new equipment and others due to weather extremes in 2006 and 2007. In each case, the campaigns were terminated involuntarily. As the recent Hurricane Sandy suggests, extreme weather related events should be anticipated for the future of any thermal processing facility and if this type of facility cannot withstand these shocks then this type of disposal option should not be considered a viable proposal.
 - b. During the pilot projects, problems with the composition of the “beneficial reuse product” Ecomelt samples arose that may make the beneficial reuse of such materials economically and environmentally unfeasible.²
 - c. The company’s own report details the need to incinerate other waste products in order to be economically viable in the long term to stay in operation: “*In this scenario, the sustainable industry model requires a consistent feedstock supply, a reliable source of alternate fuel (e.g., scrap rubber tires), and a secure outlet for the beneficial use material (Ecomelt).*”³ Each of these elements is fraught with environmental, public health and economic risk and uncertainty. How can there be a guarantee of a consistent and constant feedstock; how will these companies guarantee an economically viable beneficial reuse product if their bench scales failed to produce this result; what are the environmental and human health impacts of burning alternative fuel such as scrap tires?
- The scale of such a facility is unprecedented and very risky. There is no facility in the world that utilizes this technology at the scale needed to treat even the smallest estimated amounts of contaminated river sediment from the Passaic River. The potential engineering failures and maintenance issues related with such a large facility pose serious risks to nearby communities. The bench scale pilots produced significant engineering and maintenance failures and illustrated the problem of getting this type of facility operating to specifications in reality and not just on paper.
 - This technology, even as a pilot, proved to be extremely costly and to fully operationalize it to the scale needed would make it an extremely expensive disposal option. The relatively high cost of this option together with the risks and uncertainty inherent of this technology make it an unviable disposal option.
 - The high variability of the flow through this type of thermal incinerator has been shown to be problematic. The reduced residence time and poor mixing during increased flow conditions leads to incomplete combustion. This causes the temperature in the combustion chamber to drop thereby decreasing destruction efficiencies.⁴
 - Even if operated and maintained to exact specifications such a facility has the capacity to emit levels of pollution that would contribute to already overburdened and vulnerable communities’ pollution load. The **cumulative impact** of multiple emissions sources in areas that are densely populated and have large concentrations of existing polluting industries makes the addition of another facility in environmental justice communities even more problematic and poses a significant *environmental injustice*.

² Some of the byproducts had alumina concentrations that were higher than expected.

³ <http://www.bnl.gov/wrdadcon/publications/reports/GTI-FR-11-2008/FinalReport-15372-Cement-Lock-approved.pdf>

⁴ EPA, 1991. U.S. EPA, Office of Research and Development, “Control Technologies for Hazardous Air Pollutants,” EPA/625/6-91/014, Washington D.C. June.

EPA, 1996a. U.S. EPA, Office of Air Quality Planning and Standards, “OAQPS Control Cost Manual,” Fifth Edition, EPA 453/B-96-001, Research Triangle Park, NC. February.

EPA, 1995. U.S. EPA, Office of Air Quality Planning and Standards, “Survey of Control Technologies for Low Concentration Organic Vapor Gas Streams,” EPA-456/R-95-003, Research Triangle Park, NC., May.

- The emissions from such a facility located anywhere; we believe pose potential risks to human health and the environment that are unacceptable from a precautionary approach. The science of high heat intensive chemical processing facilities such as those proposed for this scenario is still emerging and already concerns have been raised about the potential health and environmental impacts from emissions of even small amounts of toxic chemicals such as hazardous air pollutants (HAPs), VOCs, heavy metals and particulate matter, especially ultrafine, nano-particles from these facilities.⁵
- Hazardous sediments would be more safely and professionally disposed and monitored of at a federally permitted RCRA facility than in a risky and costly technology like thermal treatment. RCRA requires facilities with double liners, real time monitoring and consistent government oversight. They are sited in areas that ensure public safety and feature redundant safety measures.

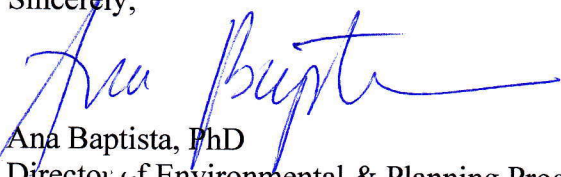
Our community has already lived with the stigma of decades long dioxin contamination in the river ecosystem and we are adamantly opposed to any option which brings with it the added stigma of being the nation's - and potentially the world's - dumping ground for contaminated sediment incineration. Under this disposal scenario, Newark Bay would become the final disposal site for hazardous dredged materials, including Superfund sites from around the NY/NJ Harbor. Turning a water pollution problem into an air pollution problem is not the answer.

We recognize that there is no perfect solution to the long term disposal of this very toxic sediment – that it must go somewhere. But our community is steadfast in our resolve to oppose incineration projects in any form and we believe based on the evidence we've seen to date that this thermal disposal scenario is not an economically or environmentally viable alternative at this time. We therefore request that this disposal option be removed from consideration in the FFS.

Thank you in advance for your attention to this critical matter and for ensuring that there is an opportunity for meaningful input from affected communities in this decision making process. We look forward to continuing this dialogue as we move ahead with the full clean up and restoration of the Passaic River.

Thank you again for your dedication to this issue.

Sincerely,



Ana Baptista, PhD
Director of Environmental & Planning Programs

CC: Judith Enck, US EPA Regional Administrator, Region 2

⁵ Vincent W. Hoyt, Eileen Mason. 2008. Nanotechnology: Emerging Health Issues. *Chemical Health and Safety, Volume 15, Issue 2*
Englert, N. 2004. Fine particles and human health—a review of epidemiological studies. *Toxicol. Lett.* 149, 235–242.
Sedman, R. and J R Esparz. 1994. The evaluation of stack metal emissions from hazardous waste incinerators: assessing human exposure through non-inhalation pathways. *Environ Health Perspectives.* 102 Suppl 2:105-12.